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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,180	12/05/2001	Amir Satran	10236-039	3617

26158 7590 09/12/2003

WOMBLE CARLYLE SANDRIDGE & RICE, PLLC
P.O. BOX 7037
ATLANTA, GA 30357-0037

EXAMINER

PETERSON, KENNETH E

ART UNIT	PAPER NUMBER
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3724

DATE MAILED: 09/12/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/002,180

Applicant(s)

SATRAN ET AL.

Examiner

Kenneth E Peterson

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 01 July 2003 is: a) ☐ approved b) ☒ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cutting insert being thicker at the inner portion than at the outer portion, as in claims 5 and 6, must be shown or the feature canceled from the claims. Furthermore, the linear outer portions, as in claim 5, must be drawn linear or the feature canceled from the claims. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent to Arai et al (EP 0 505 574).

Arai shows a milling cutter having a circular disk with inserts received therein as best seen in figures 1,6 and 7. Each insert contacts a radially extending pocket rear surface at two spaced apart abutment surfaces, as best seen in figure 1.

Arai's insert has a flat top and bottom surface, a screw (107), corners of diminished thickness (at 112), and four concave, arcuate side surfaces (109,110) with respective arcuate cutting edges (111). Arai's side surfaces and cutting edges extend

inwardly (at 110), but not at the outer portion thereof (at 109). However, the Examiner takes Official Notice that it is common for milling inserts to have acutely angled corners. For example, see the Betman et al. '137 patent or the Lynde '958 patent. It would have been obvious to one of ordinary skill in the art to have made Arai's insert corners be acutely angled, even at the outer portion, as is well known and exemplified by Betman and Lynde, in order to achieve the superior corner cutting that comes with acutely angled insert corners.

Examiner further takes Official Notice that it is common for many different types of milling tools to use the same insert. Lathes, rotary millers and the like all operate on the same principle of relative motion between the insert and the workpiece and thus the same inserts are found to effective in different types of milling. For this reason, inserts from one type of milling machine can provide teachings for inserts on a different type of milling machine.

4. Made of record is a patent to Lunblad further discussing spaced apart abutment surfaces (figure 2).

5. Applicant's arguments with respect to the claims are well taken, but are moot in view of the new, non-final grounds of rejection.

Applicant's proposed drawing correction does not actually *show* the insert being thicker in the middle, and thus the proposed drawing is not accepted.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Peterson whose telephone number is 703-308-2186. The examiner can normally be reached on Monday-Thursday, 7:30-4:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached at 703-308-1082.

All responses are encouraged to be by fax at 703-872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

kp
9-Sep-03



KENNETH E. PETERSON
PRIMARY EXAMINER